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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
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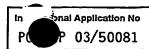
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: XCRF POLYNUCLEOTIDES AND POLYPEPTIDES AND USES THEREOF

(57) Abstract: The present invention relates to the field of metabolic research. Metabolic disorders, such as obesity, are a public health problem that it serious and widespread. XCRF polypeptides have been identified that are beneficial in the treatment of metabolic disorders. These compounds should be effective for reducing body mass and for treating metabolic-related diseases and disorders. These metabolic-related diseases and disorders include hyperlipidemias, atherosclerosis, diabetes, and hypertension.



## INTERNATIONAL SEARCH REPORT



# A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{tabular}{ll} Minimum documentation searched (classification system followed by classification symbols) \\ IPC 7 & A61K \end{tabular}$ 

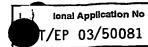
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, MEDLINE, BIOSIS, EMBASE, CHEM ABS Data, LIFESCIENCES SCISEARCH, BIOTECHNOLOGY ABS, EMBL

X  X  Y  X  Further d  Special categor  A document de considered  E earlier docur filing date  L document wi	WO 01 79454 A (MURDOCH PAUL R BEECHAM PLC (GB); SMITHKLINE 25 October 2001 (2001-10-25) page 2 page 24 -page 25  WO 02 04600 A (GLAXO GROUP LTI BEECHAM PLC (GB); SMITHKLINE 17 January 2002 (2002-01-17) page 2 page 24 page 27  WO 02 48337 A (DUGGAN BRENDAN GENOMICS INC; YAO MONIQUE G GRIFFIN) 20 June 2002 (2002-06) page 51 -page 53	;SMITHKLINE BEECHAM CO)  D ;SMITHKLINE BEECHAM C)  M;INCYTE (US);	1-14 1-14 1-14
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"A" document de considered  "E" earlier docur filing date  "L" document wi	documents are listed in the continuation of box C.	Patent family members are listed	in annex.
citation or o "O" document re other mean "P" document po	which may throw doubts on priority claim(s) or ited to establish the publication date of another other special reason (as specified) referring to an oral disclosure, use, exhibition or	<ul> <li>"T" tater document published after the inte or priority date and not in conflict with cited to understand the principle or the invention</li> <li>"X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the do</li> <li>"Y" document of particular relevance; the cannot be considered to involve an inventive be considered to involve an involvent is combined with one or moments, such combination being obvious in the art.</li> <li>"&amp;" document member of the same patent</li> </ul>	the application but early underlying the claimed invention to considered to cument is taken alone staimed invention ventive step when the one other such docuus to a person skilled
	eptember 2003	Date of mailing of the international sea	arch report
Name and mailin	ng address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL – 2280 HV Rijswijk	Authorized officer	

# INTERNATIONAL SEARCH REPORT



		T/EP 03/50081
C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 02 057450 A (MILLET ISABELLE; MACDOUGALL JOHN R; CURAGEN CORP (US); EDINGER SHL) 25 July 2002 (2002-07-25) page 3 -page 4 page 122 -page 130	1-14
P,X	WO 02 79398 A (CURAGEN CORPORATION) 10 October 2002 (2002-10-10) page 81 -page 84	1-14
A	BERUBE NATHALIE G ET AL: "Cloning and characterization of CRF, a novel C1q-related factor, expressed in areas of the brain involved in motor function" MOLECULAR BRAIN RESEARCH, ELSEVIER SCIENCE BV, AMSTERDAM, NL, vol. 63, no. 2, 8 January 1999 (1999-01-08), pages 233-240, XP002205214 ISSN: 0169-328X abstract figure 1	1-14



Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
1. As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims.
2. X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest  The additional search fees were accompanied by the applicant's protest  No protest accompanied the payment of additional search fees.

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

- 1. Claims: 1-14
  - 1.1. Claims: 1-14(all partially)
    use of XCRF for the preparation of a medicament for
    treating and/or preventing a metabolic disease,
    wherein XCRF corresponds to the amino acid sequence
    SEQ ID No. 2 and derivatives
  - 1.2. Claims: 1-14(all partially)
    use of XCRF for the preparation of a medicament for
    treating and/or preventing a metabolic disease,
    wherein XCRF corresponds to the amino acid sequence
    SEQ ID No. 4 and derivatives
  - 1.3. Claims: 1-14(all partially)
    use of XCRF for the preparation of a medicament for
    treating and/or preventing a metabolic disease,
    wherein XCRF corresponds to the amino acid sequence
    SEO ID No. 6 and derivatives
  - 1.4. Claims: 1-14(all partially)
    use of XCRF for the preparation of a medicament for treating and/or preventing a metabolic disease, wherein XCRF corresponds to the amino acid sequence SEQ ID No. 8 and derivatives

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

# INTERNATIONAL SEARCH REPORT

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nal Application No